LISTING OF THE CLAIMS

Claims 1-30 are pending in the instant application.

Listing of claims:

 (Original) A method for providing and configuring communication links, the method comprising:

determining any one usable media pair from all existing media pairs; selecting any one channel from all existing channels; and assigning said selected any one channel to said any one media pair.

- (Previously presented) The method according to claim 1, wherein said determining comprises monitoring at least said any one usable media pair.
- (Previously presented) The method according to claim 2, wherein said monitoring comprises detecting an existence of a communication signal on said any one usable media pair.
- (Previously presented) The method according to claim 1, comprising determining which one of said all existing media pairs is capable of facilitating communication at a maximum communication speed.

5. (Previously presented) The method according to claim 4, comprising

cross-connecting said selected any one channel to said one of said all existing

media pairs capable of facilitating communication at a maximum communication

speed.

6. (Previously presented) The method according to claim 1, comprising

determining which one of said all existing media pairs is capable of operating at a

reduced communication speed.

7. (Previously presented) The method according to claim 6, comprising

cross-connecting said selected any one channel to said one of said all existing

media pairs capable of operating at said reduced communication speed.

8. (Previously presented) The method according to claim 1, comprising:

flipping at least one of a channel and a media pair assignment of a

previously defined general channel and media pair configuration which defines

channel and media pair assignments for at least a portion of said all existing media

pairs; and

defining said flipped at least one said channel and said media pair

assignment as a default channel and media pair configuration.

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- (Previously presented) The method according to claim 1, comprising identifying a status of at least one of said all existing media pairs and at least one of said all existing channels.
- (Previously presented) The method according to claim 9, comprising storing said identified status.
- 11. (Previously presented) A machine-readable storage having stored thereon, a program having at least one code section for providing and configuring communication links, the at least one code section being executable by a machine for causing the machine to perform steps comprising:

determining any one usable media pair from all existing media pairs; selecting any one channel from all existing channels; and assigning said selected any one channel to said any one media pair.

 (Previously presented) The machine-readable storage according to claim 11, comprising code for monitoring at least said any one usable media pair.

- 13. (Previously presented) The machine-readable storage according to claim 12, comprising code for detecting an existence of a communication signal on said any one usable media pair.
- 14. (Previously presented) The machine-readable storage according to claim 11, comprising code for determining which one of said all existing media pairs is capable of facilitating communication at a maximum communication speed.
- 15. (Previously presented) The machine-readable storage according to claim 14, comprising code for cross-connecting said selected any one channel to said one of said all existing media pairs capable of facilitating communication at a maximum communication speed.
- 16. (Previously presented) The machine-readable storage according to claim 11, comprising code for determining which one of said all existing media pairs is capable of operating at a reduced communication speed.
- (Previously presented) The machine-readable storage according to claim 16, comprising code for cross-connecting said selected any one channel to

said one of said all existing media pairs capable of operating at said reduced communication speed.

18. (Previously presented) The machine-readable storage according to claim 11, comprising:

flipping at least one of a channel and a media pair assignment of a previously defined general channel and media pair configuration which defines channel and media pair assignments for at least a portion of said all existing media pairs; and

defining said flipped at least one said channel and said media pair assignment as a default channel and media pair configuration.

- 19. (Previously presented) The machine-readable storage according to claim 11, comprising code for identifying a status of at least one of said all existing media pairs and at least one of said all existing channels.
- (Previously presented) The machine-readable storage according to claim 19, comprising code for storing said identified status.
- 21. (Original) A system for providing and configuring communication links, the system comprising:

at least one controller adapted to determine any one usable media pair from all existing media pairs;

at least one selector adapted to select any one channel from all existing channels; and

said at least one controller adapted to assign said selected any one channel to said any one media pair.

- 22. (Previously presented) The system according to claim 21, wherein said at least one controller is adapted to determine at least said any one usable media pair.
- 23. (Previously presented) The system according to claim 22, wherein said at least one controller comprises a detector adapted to detect an existence of a communication signal on said any one usable media pair.
- 24. (Previously presented) The system according to claim 21, wherein said at least one controller is adapted to determine which one of said all existing media pairs is capable of facilitating communication at a maximum communication speed.

- 25. (Previously presented) The system according to claim 24, wherein said selector is adapted to cross-connect said selected any one channel to said one of said all existing media pairs capable of facilitating communication at a maximum communication speed.
- 26. (Previously presented) The method according to claim 21, wherein said at least one controller is adapted to determine which one of said all existing media pairs is capable of operating at a reduced communication speed.
- 27. (Previously presented) The system according to claim 26, wherein said selector is adapted to cross-connect said selected any one channel to said one of said all existing media pairs capable of operating at said reduced communication speed.
- 28. (Previously presented) The system according to claim 21, wherein said selector is adapted to flip at least one of a channel and a media pair assignment of a previously defined general channel and media pair configuration which defines channel and media pair assignments for at least a portion of said all existing media pairs; and

said controller is adapted to define said flipped at least one said channel and said media pair assignment as a default channel and media pair configuration. Application No. 10/612,729 Reply to Final Office Action of May 31, 2007

- 29. (Previously presented) The system according to claim 21, wherein said at least one controller is adapted to identify a status of at least one of said all existing media pairs and at least one of said all existing channels.
- 30. (Previously presented) The system according to claim 29, comprising at least one register adapted to store said identified status.